

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A semiconductor device comprising:

a first gate electrode group having a plurality of gate electrodes formed on a semiconductor substrate to be away from each other at first equal spacings;

a first gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the first gate electrode group;

a channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the first gate electrode group;

a source diffused layer between first gate electrodes of the first gate electrode group;

a source contact having a portion formed separated from the first gate electrode of the first gate electrode group by a second spacing greater than the first spacing; and

source regions for electrically interconnecting the first gate electrode group and the source contact.

Claim 2 (Original): The semiconductor device of Claim 1, wherein the source regions are connected to each other at one end of the first gate electrode group, and separated from each other at the other end of the first gate electrode group.

Claim 3 (Currently Amended): A semiconductor device comprising:

a first gate electrode group having a plurality of gate electrodes formed on a semiconductor substrate to be away from each other at first equal spacings;

a first gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the first gate electrode group;

a channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the first gate electrode group; a source diffused layer between first gate electrodes of the first gate electrode group; a source contact portion formed separated from the first gate electrode group to be away from the first gate electrode group at a second spacing; and source regions for electrically interconnecting the first gate electrode group and the source contact portion, wherein the source regions are connected to each other at one end of the first gate electrode group, and separated from each other at the other end of the first gate electrode group.

Claim 4 (Currently Amended): A semiconductor device comprising:

a first gate electrode group having a plurality of gate electrodes formed on a semiconductor substrate to be away from each other at first equal spacings; a first gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the first gate electrode group; a first channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the first gate electrode group; a first source diffused layer between first gate electrodes of the first gate electrode group; a second gate electrode group having a plurality of gate electrodes formed on the semiconductor substrate to be away from each other at the first equal spacings[[::]]; a second gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the second gate electrode group;

a second channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the second gate electrode group;

a second source diffused layer between first gate electrodes of the second gate electrode group;

a source contact portion formed separated between the first and second gate electrode groups to be away from the first and second gate electrode groups at a second spacing; and source regions for electrically interconnecting the first gate electrode group and the source contact portion,

wherein the source regions are connected to each other at one end of the first gate electrode group, and separated from each other at the other end of the first gate electrode group.

Claim 5 (Original): A semiconductor device according to claim 4, wherein the gate electrodes of the first group are connected to each other at the other end.

Claim 6 (Original): A semiconductor device according to claim 4, wherein the first and second gate electrode groups are formed in trench structures.

Claim 7 (Original): A semiconductor device according to claim 4, wherein each of the source regions is a diffused layer formed on the semiconductor substrate.

Claim 8 (Original): A semiconductor device according to claim 4, wherein the source contact and the first gate electrode group constitute one MOS transistor.

Claim 9 (Original): A semiconductor device according to claim 4, further comprising a source electrode on the semiconductor substrate,
wherein the source contact portion is an electrode drawn from the source electrode.

Claim 10 (Original): A semiconductor device according to claim 4, wherein all the gate electrodes of the first gate electrode group are used as gates for a MOS transistor.

Claim 11 (Currently Amended): A semiconductor device comprising:
a first gate electrode group having a plurality of gate electrodes formed on a semiconductor substrate to be away from each other at first equal spacings;
a first gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the first gate electrode group;
a first channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the first gate electrode group;
a first source diffused layer between first gate electrodes of the first gate electrode group;
a second gate electrode group having a plurality of gate electrodes on the semiconductor substrate to be away from each other at the first equal spacings;
a second gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the second gate electrode group;
a second channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the second gate electrode group;
a second source diffused layer between first gate electrodes of the second gate electrode group;

a third gate electrode group having a plurality of gate electrodes formed on the substrate to be away from each other at the first equal spacings;

a third gate insulating film formed on both of sidewall-surfaces opposed to each other of a first gate electrode of the third gate electrode group;

a third channel region formed along the gate insulating film on both of the sidewall-surfaces opposed to each other of the first gate electrode of the third gate electrode group;

a third source diffused layer between first gate electrodes of the third gate electrode group;

a first source contact portion formed between the first and second gate electrode groups to be away from the first and second gate electrode groups at a second spacing;

a second source contact portion formed between the second and third gate electrode groups to be away from one selected from the second and third gate electrode groups at the second spacing;

first source regions which electrically interconnect the first gate electrode group and the first source contact portion; and

second source regions which electrically interconnect the second gate electrode group and the second source contact portion,

wherein the first source regions are connected to each other at one end of the first gate electrode group and are separated from each other at the other end of the first gate electrode group, and the second source regions are connected to each other at one end of the second gate electrode group and are separated from each other at the other end of the second gate electrode group.

Claim 12 (Original): A semiconductor device according to claim 11, wherein the first and second gate electrode groups are connected to each other at the other end.

Claim 13 (Canceled).

Claim 14 (Original): A semiconductor device according to claim 11, wherein the first and second gate electrode groups are formed in trench structures.

Claim 15 (Original): A semiconductor device according to claim 11, wherein each of the first and second source regions is a diffused layer formed on the semiconductor substrate.

Claim 16 (Original): A semiconductor device according to claim 11, wherein the first source contact portion and the first gate electrode group constitute one MOS transistor, and the second source contact portion and the second gate electrode group constitute another MOS transistor.

Claim 17 (Original): A semiconductor device according to claim 11, wherein each of the first and second source contact portions is an electrode drawn from a source electrode, and these portions are connected to each other.

Claim 18 (Original): A semiconductor device according to claim 11, wherein all the gate electrodes of the first and second gate electrode groups are used as gates for MOS transistors.

Claim 19 (Canceled).

Claim 20 (Original): A semiconductor device according to claim 11, wherein the second spacing is greater than the first spacing.